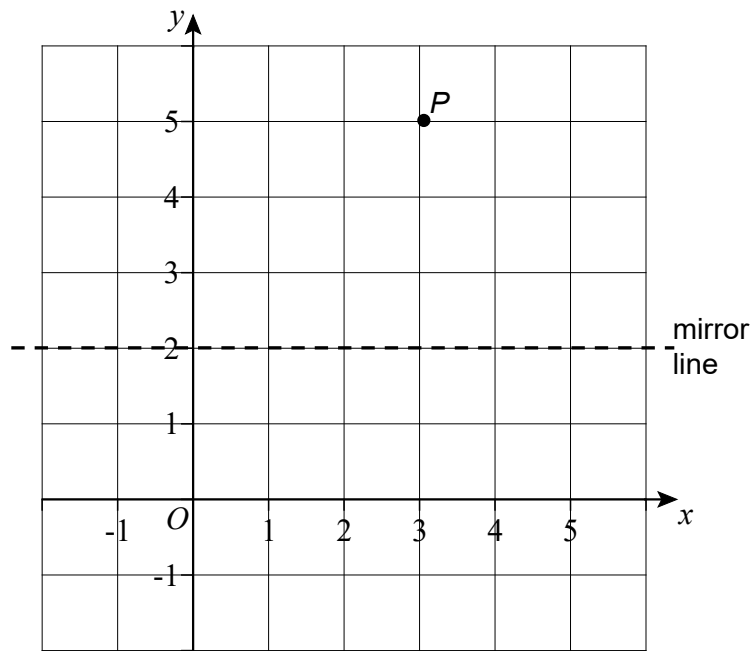


# Topic Test 1 (20 minutes)

## Coordinates and linear graphs - Foundation

1



Point  $P$  is reflected in the mirror line.

1 (a) Circle the equation of the mirror line.

[1 mark]

$y = x + 2$

$x + y = 2$

$x = 2$

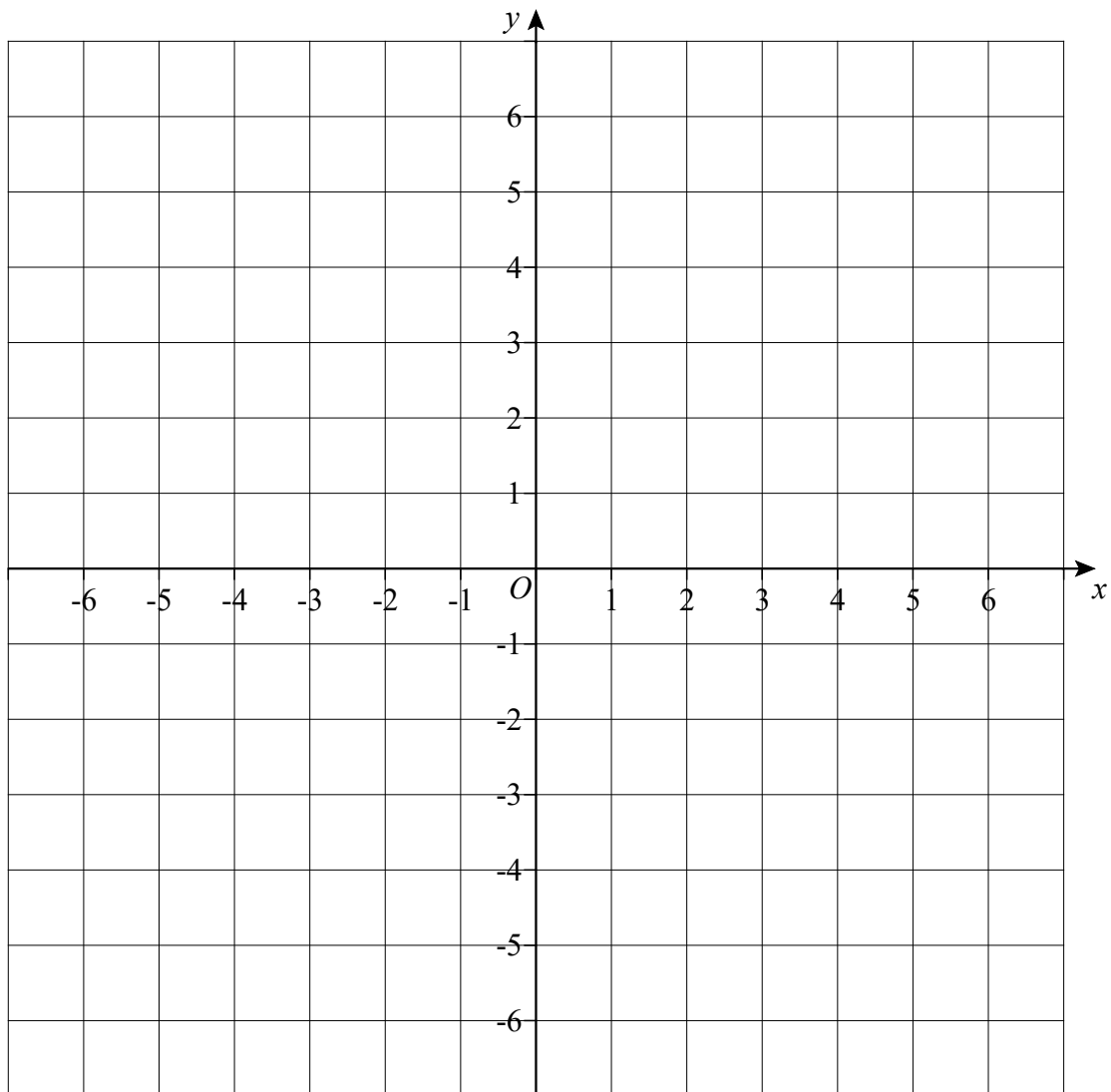
$y = 2$

1 (b) Work out the coordinates of the reflection of point  $P$ .

[1 mark]

Answer ( \_\_\_\_\_ , \_\_\_\_\_ )

2



2 (a) Plot the points  $A(-3, 2)$  and  $B(1, -2)$  on the grid.

[2 marks]

2 (b) Point  $C$  has  
the same  $x$ -coordinate as  $A$   
three times the  $y$ -coordinate of  $B$ .

Plot  $C$  on the grid.

[2 marks]

2 (c) Circle the **two** answers that describe triangle  $ABC$ .

[2 marks]

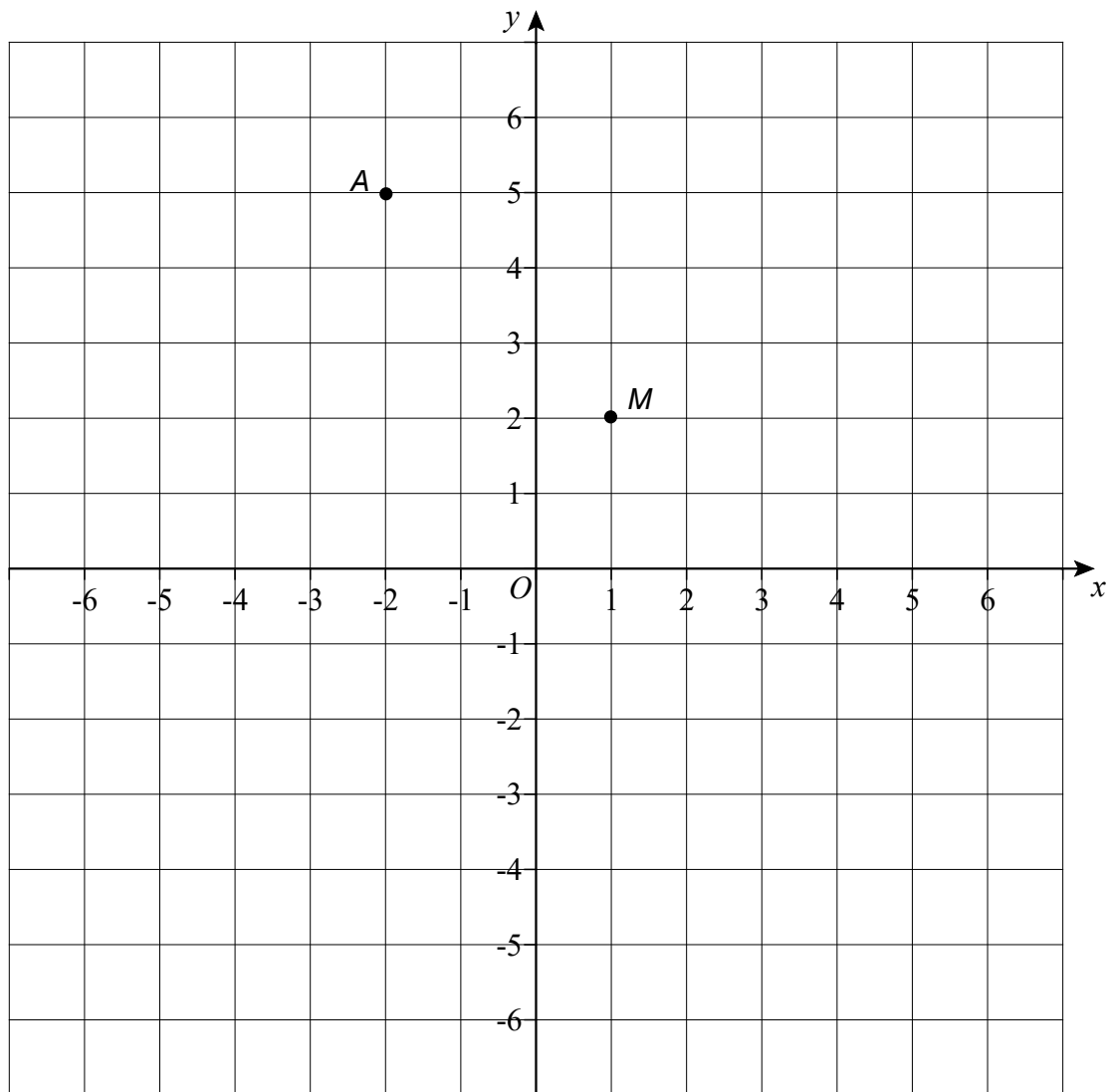
equilateral

isosceles

scalene

right-angled

3



3 (a)  $M$  is the midpoint of the line  $AB$ .

Work out the coordinates of  $B$ .

[2 marks]

Answer ( \_\_\_\_\_ , \_\_\_\_\_ )

3 (b) Write down the coordinates of two other points on the line  $AB$  with midpoint  $M$ .

[2 marks]

Answer ( \_\_\_\_\_ , \_\_\_\_\_ ) and ( \_\_\_\_\_ , \_\_\_\_\_ )

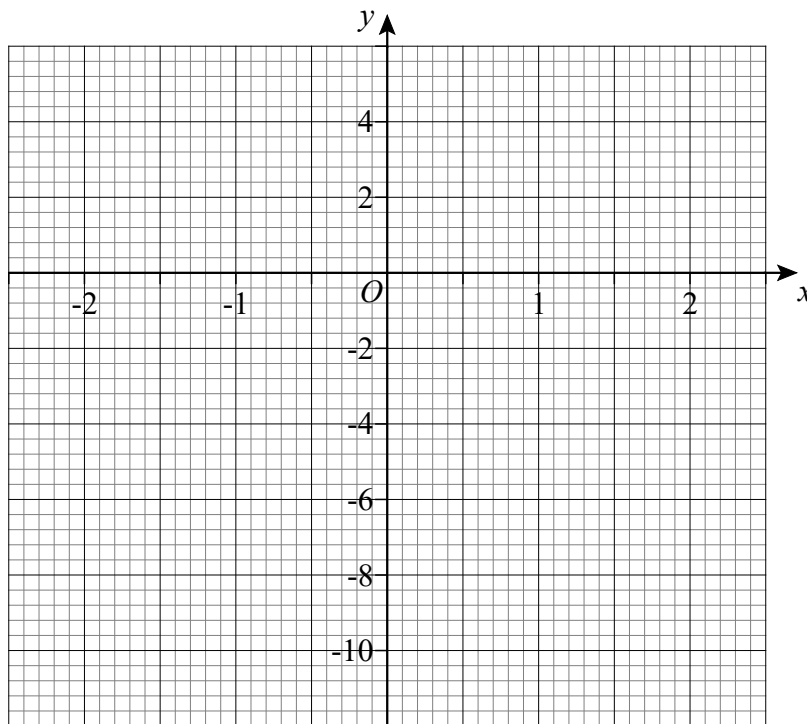
4 (a) Complete the table for  $y = 3x - 2$

[2 marks]

$x$	-2	-1	0	1	2
$y$	-8		-2		4

4 (b) On the grid draw the graph of  $y = 3x - 2$  for values of  $x$  from -2 to 2

[2 marks]



5 Work out the coordinates of **two** points that lie on the line  $y = 12 - 5x$

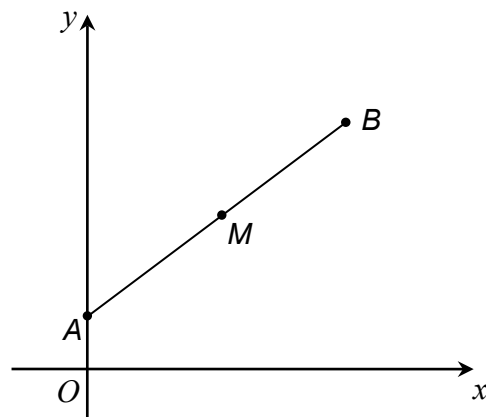
[2 marks]

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Answer (      ,      ) and (      ,      )

6  $A$  is  $(0, 4)$  and  $B$  is  $(10, 9)$



Not drawn accurately

Work out the coordinates of the midpoint,  $M$ , of the line  $AB$ .

[2 marks]

Answer (              ,              )